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## ELECTRONIC THESIS AND DISSERTATION UNSYIAH

### TITLE

PERKIRAAN SAAT KEMATIAN BERDASARKAN PENURUNAN SUHU TUBUH MAYAT  
DENGAN MENGGUNAKAN TERMOMETER DIGITAL PADA AKSILA

### ABSTRACT

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Shortly after the death, a rapid change that probably, within a short time of the death. One of the changes is a decrease of post-mortem temperature as measured by thermometer through rectum. Prediction of the rectal temperature with digital thermometer on the axilla because of the difficulty to find the thermometer. This study, was conducted to determine relationship on the patterns of decline in body temperature as measured by digital thermometer on the axilla to the approximate length of time of death and obtain simple equation estimated time of the death. The study design of this study was observational with cross-sectional approach. The technique sampling used is total sampling with concerning to inclusion and exclusion criteria. This study was conducted from January, 1st to March, 31st 2012 with 35 people as samples. The study data was obtained from measurements of body temperature in the inpatient room RSUDZA with digital thermometer on the axilla for 15 minutes, 30 minutes and 60 minutes after death. Room temperature was measured at same time. The result of statistical t-test showed significant differences in temperature between time 15 minutes, 30 minutes, and 60 minutes. The result of correlation test showed that there is a very strong relationship between the decrease in body temperature as measured with digital thermometer on the axilla to the prediction of the length of time of death with a correlation coefficient of 0.999 which form a linear pattern of negative and found no plateau in the time of death. The results of this study also resulted in similarity regression of  $y = 831.950 - 22.891x$  that can be used to estimate the time of death at the beginning of death.

Keywords: body temperature, post-mortem, time of death